**SECRET** 

19/GS/AF

# Hungary

**March 1973** 

NATIONAL INTELLIGENCE SURVEY

**SECRET** 

# NATIONAL INTELLIGENCE SURVEY PUBLICATIONS

The basic unit of the NIS is the General Survey, which is now published in a bound-by-chapter format so that topics of greater perishability can be updated on an individual basis. These chapters—Country Profile, The Society, Government and Politics, The Economy, Military Geography, Transportation and Telecommunications, Armed Forces, Science, and Intelligence and Security, provide the primary NIS coverage. Some chapters, particularly Science and Intelligence and Security, that are not pertinent to all countries, are produced selectively. For small countries requiring only minimal NIS treatment, the General Survey coverage may be bound into one volume.

Supplementing the General Survey is the NIS Basic Intelligence Fact-book, a ready reference publication that semiannually updates key statistical data found in the Survey. An unclassified edition of the factbook omits some details on the economy, the defense forces, and the intelligence and security organizations.

Although detailed sections on many topics were part of the NIS Program, production of these sections has been phased out. Those previously produced will continue to be available as long as the major portion of the study is considered valid.

A quarterly listing of all active NIS units is published in the *Inventory* of *Available NIS Publications*, which is also bound into the concurrent classified Factbook. The Inventory lists all NIS units by area name and number and includes classification and date of issue; it thus facilitates the ordering of NIS units as well as their filing, cataloging, and utilization.

Initial dissemination, additional copies of NIS units, or separate chapters of the General Surveys can be obtained directly or through liaison channels from the Central Intelligence Agency.

The General Survey is prepared for the NIS by the Central Intelligence Agency and the Defense Intelligence Agency under the general direction of the NIS Committee. It is coordinated, edited, published, and disseminated by the Central Intelligence Agency.

#### WARNING

This document contains information affecting the national defense of the United States, within the meaning of title 18, sections 793 and 794 of the US code, as amended. Its transmission or revelation of its contents to or receipt by an unauthorized purson is prohibited by law.

CLASSIFIED BY 019641. EXEMPT FROM GENERAL DECLASSIFI-CATION SCHEDULE OF E. O. 11652 EXEMPTION CATEGORIES 5B (1), (2), (3). DECLASSIFIED ONLY ON APPROVAL OF THE DIRECTOR OF CENTRAL INTELLIGENCE.

# WARNING

The NIS is National Intelligence and may not be released or shown to representatives of any foreign government or international body except by specific authorization of the Director of Central Intelligence in accordance with the provisions of National Security Council Intelligence Directive No. 1.

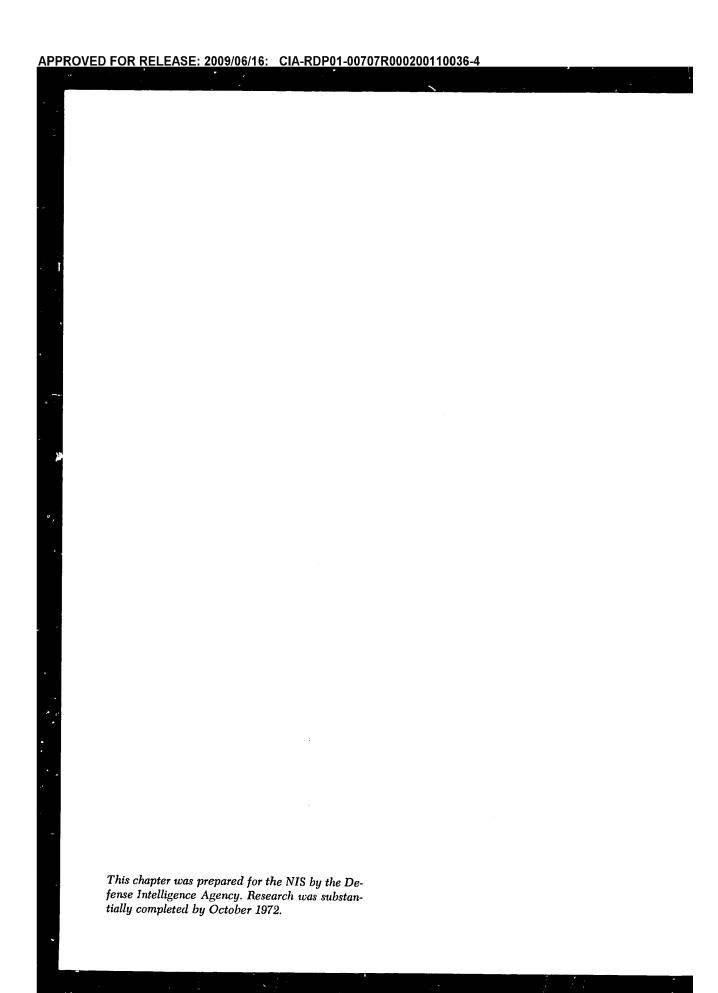
For NIS containing unclassified material, however, the portions so marked may be made available for official purposes to foreign nationals and nongovernment personnel provided no attribution is made to National Intelligence or the National Intelligence Survey.

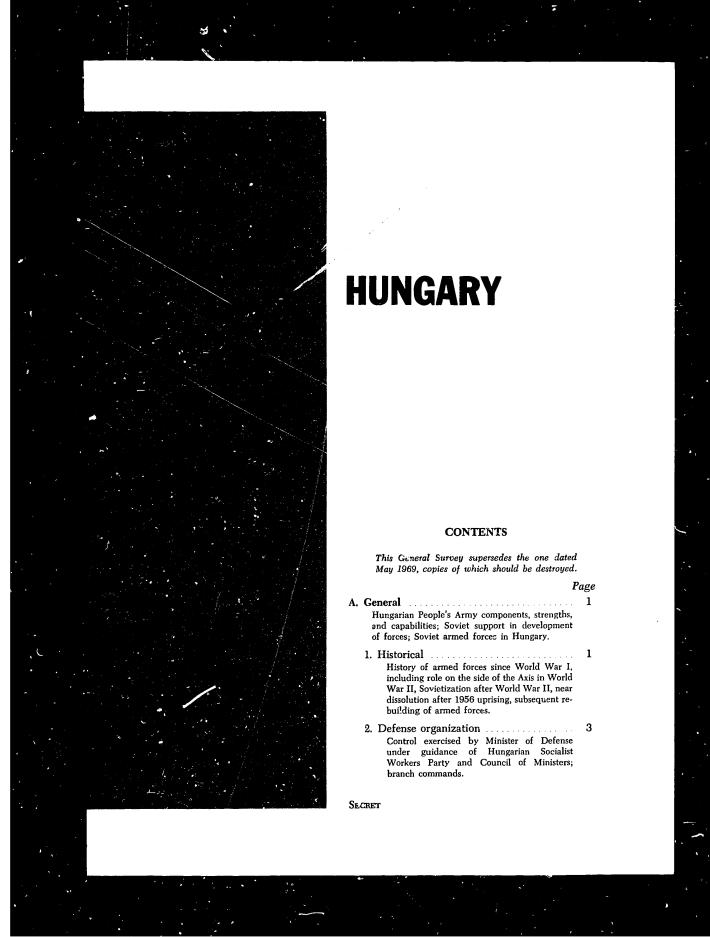
Subsections and graphics are individually classified according to content. Classification/control designations are:

(U/OU) . . Unclassified/For Official Use Only

(C) ..... Confidential

(S) .... Secret





		Page	1	Page
	<ol> <li>Military manpower         Breakdown by 5-year age groups of males of military age; number of fit males coming of military age each year; reserve system; compulsory military service.     </li> </ol>		3. Training  Basic training and technical instruction for enlisted men; officer training; joint and combined exercises.	12
	4. Strength trends		4. Logistics	13
	personnel strengths since World War II.  5. Training  Summary of training system and Soviet in-		D. Air and air defense forces  Composition, missions, and capabilities.	
	fluence; joint and combined training, includ- ing participation in Warsaw Pact maneuvers.  6. Economic support and military budget	6	Organization     Air defense part of Warsaw Pact system co- ordinated by Soviets; air defense zones and	13
	a. Economic support  Domestic production of limited range of military items; heavy dependence on im-		sectors; Hungarian and Soviet radar defenses; control of fighter aviation.  2. Strength, composition, and disposition	13
	ports, particularly from U.S.S.R.  b. Military budget		Personnel strength, aircraft, and deployment of fighter regiments; Soviet Air Force in Hungary; SAM forces, including Soviet-manned sites; aircraft control and warning radar sites.	10
	7. Logistics		3. Training	15
	Organization of the logistics system; responsi- bilities of the Rear Service Directorate and branch commands for the procurement, stor- age, and issue of supplies.		a. Air force  Pilot recruitment and training, including training in U.S.S.R.; operational training exercises.	15
В.	Ground forces  Mission; reorganization and development of ground forces under Soviet control.		b. Surface-to-air missile forces  Training based on Soviet doctrine and methods; training and firing exercises in	15
	<ol> <li>Organization         Control of the ground forces; Soviet pattern of divisional and lower unit organization; gen-     </li> </ol>		U.S.S.R. 4. Logistics	15
	eral appraisal of equipment.  2. Strength, composition, and disposition  Personnel strength; reserves; deployment of forces; Soviet ground forces in Hungary.  3. Training.		a. Air force  Patterned after Soviet system; Soviet Union source of aircraft, engines, and spare parts; aircraft maintenance facilities; appraisal of logistics system.	15
	<ol> <li>Training         Appraisal of individual and small-unit training; training program for conscripts; major schools for officers and enlisted men; training program for reservists.     </li> </ol>		b. Surface-to-air missile forces  Dependence on U.S.S.R. for missiles, equipment, and special parts.	16
	<ol> <li>Logistics         Procurement, storage, and issue responsibilities; supply procedures.     </li> </ol>		E. Militarized security forces  Brief description of organization and training; emphasis on political reliability in selection and on political indoctrination in training of personnel.	· 16
C.	Naval forces  Mission, wartime and peacetime functions, capabilities of Military River Flotilla.		l. Frontier Guard	16
	Organization     Chain of command; principal elements of the 44th Independent brigade and their responsi-		ganization; training of enlisted men and of- ficers; weapons and transportation.	16
	bilities.  2. Strength, composition, and disposition.		Internal Security Troops	10
	Personnel strength and deployment; inventory		Glossary	19

# **FIGURES**

	P	age			Page
Fig. 1	Organization of Hungarian armed		Fig. 5	Scup A missile and crew (photo)	8
	forces (chart)	4	Fig. 6	FROG-5 missile system (photo)	
Fig. 2	Armed forces personnel strengths		Fig. 7	SNAPPER antitank missiles (photo)	9
	(table)	6	Fig. 8	Communications troops in training	
Fig. 3	Hungarian-manufactured version of the Soviet AKM automatic rifle		Fig. 9	(photo) Typical SA-2 surface-to-air missile site (photo)	
	(photo)	7	Fig. 10	Typical SA-3 surface-to-air missile	1.4
Fig. 4	Annual military budgets (table)	7	J	site (photo)	15

# **Armed Forces**

# A. General

The armed forces of Hungary consist of ground, naval, and air and air defense elements known collectively as the Hungarian People's Army (MN). They constitute a single, highly unified military force controlled by the Minister of Defense. Total personnel strength is 97,400. Of these, 90,000 are in the ground element (including 4,600 assigned to the air defense element of the air and air defense forces), 1,400 in the naval element, and 6,000 in the air element of the air and air defense forces. Major combat elements include six ground force divisions and three field artillery and one antiaircraft artillery regiments; one missile (Scup) brigade; a naval (river) flotilla with 123 craft; and three air force fighter regiments, one transport squadron, and one helicopter squadron, with a total of 163 aircraft. (S)

The armed forces are supplemented by approxinately 35,000 militarized security troops, subordinate to the Ministry of Interior. These include 20,000 in the Fronticr Guard and 15,000 in the Internal Security Troops (BKH), commonly known as the Interior Troops. Included arbitrarily under the Frontier Cuard are about 100 personnel and 25 craft in quasi-naval elements and various police organizations. (S)

The Hungarian Peop's Army is one of the smallest and least effective armed forces of the active Warsaw Pact members. The rebuilding of these Hungarian forces following their near dissolution after the 1956 revolt was completed by 1967. Minor changes in organizational structure may be expected from time to time without significantly affecting capability. Although the forces are not capable of conducting sustained independent action on a large scale, they could perform defensive and limited offensive operations as part of a Soviet-commanded Warsaw Pact campaign. In other than a territorial defense role, however, the reliability of Hungarian troops is questionable. (S)

All armed forces components have then developed with extensive support and direction by the U.S.S.R. A degree of Soviet control continues to be exercised through the unified command of the

Warsaw Pact in Moscow, the small Soviet military mission in Budapest, and the Soviet advisers to the Hungarian militarized security forces. In addition, the Soviet Union keeps about 50,000 men in Hungary—four line divisions and six air regiments—on the basis of a bilateral status-of-forces agreement signed in May 1967. (S)

# 1. Historical (C)

Hungarian troops, true to their historic tradition, performed well in World War I as part of the Austro-Hungarian Empire's military forces. With the breakup of the dual monarchy, the military history of modern Hungary began. The Treaty of Trianon, imposed by the Allies in 1919, reduced Hungary by more than two-thirds of its territory and about 60% of its population. In addition, terms of the treaty restricted the armed forces to a maximum of 35,000 men, called for an extended term of enlisted service, and prohibited heavy artillery, armored vehicles, and aircraft. These limitations resulted in an emphasis on quality that ultimately developed a well-trained nucleus for future expansion.

Having lost so heavily as a consequence of World War I, Hungary became a leading advocate of revision of the peace settlement, in particular, it sought to terminate the military and territorial provisions of the Trianon Treaty. With the deterioration of the international situation in the mid-1930's and the emergence of a strong, ambitious Nazi Germany also eager to revise the peace settlement, Hungary became increasingly vocal in its demands. Hungary supported Hitler during the Sudeten crisis of 1938 and joined in the dismembering of Czechoslovakia. With strong German support, the strength of the military forces was raised to approximately 150,000 men in 1939-40.

Hungary signed the Axis Pact in November 1940 and ultimately entered World War II on the side of the Axis. At the outset, Hungary supplied Germany with food, raw materials, and the products and was promised aid in restoring the pre-Trianon borders. Some former territories lost to Czechoslovakia, Romania, and Yugoslavia under the Trianon

Treaty were in fact returned to Hungarian control. In June 1941 Hungary declared war on the Soviet Union and Hungarian troops joined in the invasion.

Hungary's armed forces reached a peak wartime strength of more than 375,000 men, and at times, as many as 250,000 served on the Eastern Front. The climax of Hungarian participation in the Russian campaign came in January 1943 near Voronezh on the Don river. Here a force of 11 line divisions was overwhelmed and virtually destroyed by Soviet forces in an action preliminary to the epic Battle of Stalingrad. As a result of this disaster, as well as of domestic developments, the Hungarian military units from that time onward were used almost entirely in the rear areas for line-of-communications security and occupation duties. In March 1944 the Germans occupied Hungary, an occupation that lasted until April 1945.

In spite of the country's ancient antipathy for Slavdom and Russia and its animosity toward communism, Hungary was forcibly drawn into the Soviet world following World War II. Because of the basically German orientation of the armed forces, they were allowed to deteriorate rapidly after the war. Only a small cadre remained after the establishment of a democratically constituted provisional government, which included a new Defense Ministry and provided for a new military organization. Nearly all vestiges of the wartime force were rooted out, and the military was infiltrated by the Communists. The Communists assumed power in 1947, and long-time Communist Gen. Mihaly Farkas was appointed Minister of Defense. With Soviet supervision and support the ground forces were expanded beyond the 65,000-man limit set in the World War II peace treaty, the air force was expanded beyond its 5,000-man limitation, and a militarily controlled river guard was reestablished. A large Soviet military mission, which at one time may have numbered 5,000 men, was established to supervise the redevelopment of the armed forces and insure their conformity to Soviet principles and concepts.

Sovietization of the armed forces progressed steadily. Experienced officers and noncommissioned officers whose political reliability was doubted by the Communists were replaced with younger, more reliable men, many of whom were schooled in the U.S.S.R. Organization was along Soviet lines and shipments of up-to-date Soviet equipment kept pace with progress in training and organization.

The strength of the armed forces and militarized security forces had been expanded to over 220,000

by 1952. This rapid growth reflected the Communist regime's (and the Soviet) determination to build a relatively large force as a politically stabilizing factor in Hungary and in response to various external developments. These included the ouster of neighboring Yugoslavia from the Soviet bloc, the formation of NATO, the rearmament of the West, and finally the Korean war.

By the early 1950's the armed forces were well organized, well equipped, and well trained. They were capable of carrying on effective combined-arms operations on a substantial scale. The efficient reserve and mobilization system would have permitted rapid expansion—especially of the ground forces—in the event of war.

In May 1955, Hungary joined the Warsaw Pact, a collective security organization created by the U.S.S.R. as a political response to the rearming and admission into NATO of West Germany. In November 1956 Hungary unilaterally withdrew from the Warsaw Pact, but this action was canceled after the Soviets had crushed the revolt and the Kadar government had been installed.

The armed forces initially played no significant part in the sudden popular uprising that began in Hungary on 23 October 1956. Only a few organized units went over to the rebellion. The militarized security forces collapsed, however, and efforts made to bring troops into Budapest to quell the rioting there were largely unsuccessful; the mechanized division that was moved into Budapest was quickly withdrawn. Senior officers, although pro-Soviet, hesitated to order military action against their own people. Lacking guidance from the top, the officers and noncommissioned officers at the lower levels would not, or could not, take effective action. In addition, it was doubted that the rank and file of troops would fire on their own unarmed countrymen. By the same token, except for a few scattered elements, the armed forces did not resist the Soviet mechanized forces that swiftly noved in and occupied strategic points throughout the country.

Following the uprising, Hungary was left with little in the way of an organized military force. In addition to wholesale desertions, one entire conscript class was released on schedule in November 1956 and no effort was made until the following spring to induct the next eligible class. Total strength dropped to about 26,000 men. In January 1957, deserters were given the opportunity to avoid penalty if they returned to duty immediately; by the end of the month strength had risen to perhaps 40,000 or 50,000 men.

Loyalty oaths were administered to officers who desired to remain in service, and conscription of a new age class was initiated in April 1957. Reconstitution of the militarized security forces was assigned high priority, and their strength was rapidly raised to the prerevolt level. Total ground and air forces strength rose gradually during the ensuing years, reaching an estimated level of 105,000 men in 1960. Units were reorganized along Soviet lines to give greater tactical flexibility and potential effectiveness. Equipment which had been collected as a precautionary measure from Hungarian military units and stored under Soviet and Hungarian military control during and following the revolt was gradually reissued.

Slow but steady progress has been made in equipping and training the armed forces, with emphasis given to developing the proficiency of the individual soldier and the smaller units. Accelerated by the Berlin crisis in the autumn of 1961, a substantial increase in military spending was made, the introduction of new major items of modern equipment was begun, and an extensive propaganda campaign was launched to glorify the armed forces as able and active members of the Warsaw Pact forces.

In August 1968, elements of the Hungarian People's Army participated in the invasion of Czechoslovakia. The token force deployed to Czechoslovakia is estimated not to have exceeded 6,000 men.

# 2. Defense organization (S)

Under the guidance of the Hungarian Socialist Workers Party (HSWP) and the Council of Ministers, the Minister of Defense controls and directs all elements of the armed forces. The overall structure of the Hungarian high command follows the Communist pattern-relatively simple, rigid, and highly centralized. A small Soviet mission remains in Hungary to advise and monitor the higher echelons of the Hungarian military establishment. The Minister of Defense is a member of the Party Central Committee and takes part in formulating national policy. He is commander in chief of the Hungarian People's Army and exercises control with the assistance of a first deputy minister, a deputy minister who is the Chief of the General Staff, a general staff, a number of directorates, and branch commands (Figure 1). All components of the ministry except the branch commands are unified and serve the armed forces as a whole, although the high command is dominated by officers of the ground forces. The incumbent Minister of Defense is a Communist party functionary with limited military experience.

There are three groupings of operational units under the Ministry of Defense. The largest, the tactical ground units, includes the six line divisions and one missile (SCUD) brigade, as well as numerous separate smaller units of line, combat support, and service types controlled by the 5th Army (headquarters at Szekesfehervar 1) and an unidentified corps (headquarters at Cegled). All air units, as well as those ground forces units of surface-to-air missile (SAM) and air control and warning (ACW) type assigned to home air defense, are controlled by the National Air Defense Command. The Military River Flotilla, the third operational component, is Hungary's navy, equipped only with small river craft.

The 5th Army and the unidentified corps supply logistic and administrative support to all tactical ground units, relieving the general staff of this burden acquired following the abolition of the pre-revolt territorial administrative districts.

The Ministry of Defense is also in charge of civil defense. Through a National Headquarters for Civil Defense (PVOP), it controls, coordinates, and administers all civil defense activity.

# 3. Military manpower (C)

There were approximately 2,659,000 Hungarian males of military age (15 to 49 years inclusive) in January 1973. Of these, an estimated 2,140,000 were considered fit for military service. The number of fit males coming of military age (18) each year is expected to be about 90,000 in the next few years. A breakdown by 5-year age groups of the estimated available military manpower follows:

	TOTAL NUMBER	Maximum number fit for
Age	OF MALES	MILITARY SERVICE
15-19	473,000	430,000
20-24	432,000	380,000
25-29	378,000	330,000
30-34	350,000	290,000
35-39	325,000	250,000
40-44	352,000	245,000
45-49	349,000	215,000
Total, 15-49	2,659,000	2,140,000

Hungary's highly efficient reserve and mobilization system follows the same pattern as that of other

<sup>&#</sup>x27;For diacritics on place names see the list of names at end of the chapter.

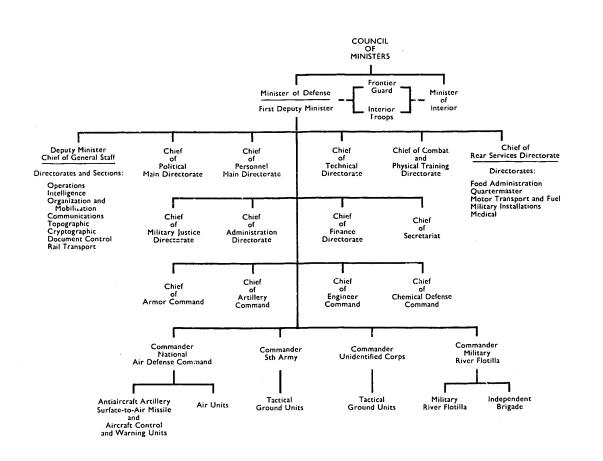


FIGURE 1. Organization of Hungarian armed forces (S)

Warsaw Pact nations. A detailed mobilization plan is maintained for the rapid mustering, assignment, and movement of all persons liable for wartime service (males 18 through 65). Reservists frequently participate in field exercises or maneuvers of the unit to which they would be assigned if mobilized. All males are considered members of the reserves until age 50 (enlisted men) or age 60 (officers). The reserves consist of the ready reserve (personnel who have served on active duty) and the second-line reserve (untrained personnel who have never served on active duty). In each category, the length and frequency of training and the order in which reservists wor. bilized are based on age and previous mil uning. About 4 forces 690,000, 693,000 trained reservists naval forces 2,800. and force pilots) who a forces since their have serv'. "Sovieti " are available for callup.

From the point of view of physical and emotional qualities and adaptability to military life, Hungarians generally make good soldiers. In the past their performance has been characterized by a spirit of individualism, national pride, and resourcefulness, although today these qualities probably are tempered by a generally apathetic attitude toward the Communist regime.

Under the provisions of the National Service Act of 1960, as amended in 1964, Hungarian males are liable for 3 years of active service in the armed forces, including the militarized security forces. Most serve only 2 years, but some men in the river flotilla, the air force, the Interior Troops, and certain ground forces specialists serve longer. Each male is liable for service as a conscript or reservist from the year of his 18th birthday to the year of his 50th birthday. Commissioned reserve officers

are subject to military service until age 60. The . ld policy of inducting most of the men in the year of their 20th birthday has been changed, and now most men are inducted during the year of their 18th birthday. Before the induction age was lowered to 18, an individual's liability to conscription ceased at age 24, but that, too, has been lowered (to age 23). Some members of each conscript class are screened out for political reasons or are deferred on such personal grounds as having dependents, studying in certain fields, farming, or working in essential industries. These men, as well as those found temporarily unfit, are reexamined annually until the age of 23. Of the nearly 50,000 men inducted each year, about 35,000 go into the ground forces, 1,300 into the air and naval forces, and 12,500 into the militarized security forces.

Men may volunteer for military service as early as the year of their 17th birthday. Conscripts and volunteers may extend their terms of service if they can meet stringent military, political, meral, and physical requirements.

Great efforts are made to increase the prestige and improve the morale of the armed forces. The value of Hungarian membership in the Warsaw Pact is stressed repeatedly in the press, and even routine activities of armed forces units and individual soldiers are given relatively extensive coverage in news media. Inductees are honored by elaborate ceremonies, and their families are encouraged to participate in the oath-taking formalities.

Political reliability is one of the chief criteria for officer selection. Almost all selectees are members of the Hungarian Socialist Workers Party or the Communist Youth League (KISz), or have otherwise demonstrated loyalty to the regime. They are recruited primarily from the working class and the peasantry.

Officers and career noncommissioned officers seem to accept military service willingly in return for an assured career in a time-honored profession. The typical conscript accepts his compulsory service without protest and as part of a Hungarian tradition, and he may later look back upon it with pride. His active duty, however, is not performed with particular enthusiasm. Low pay and generally poor living conditions of enlisted men, NCO's, and junior officers, as well as a generation gap between senior and junior officers, suggest the likelihood of dissatisfaction in the armed forces.

# 4. Strength trends (S)

Armed forces strengths have varied little since early 1960, indicating that the Hungarian People's Army has achieved its desired postrevolt force level. In the autumns of both 1961 and 1962 significant but temporary increases occurred in response to the Berlin and Cuban crises, respectively. On both occasions, conscripts due to be released from active service were retained, normal conscript inductions were held, and some reserves were called up. Total strength probably increased by about 30,000 men on each occasion. Reserves and held-over conscripts were released when tensions abated, and no permanent strength increase resulted. During the Czechoslovak crisis in 1968 an estimated 5,000 reservists were called up and assigned to existing units to improve combat readiness. Most of these reservists were released in November 1968.

The estimate of the strength of the ground forces was revised downward in late 1967 from 100,000 to 90,000, a result of a lowering of manning levels in the six divisions and support units. The estimated strength of the armed forces for selected years is shown in Figure 2.

# 5. Training (S)

Training is based on the Soviet system. The Combat and Physical Training Directorate of the Ministry of Defense is responsible for the annual training programs, the organization and conduct of all military competitive contests, and the coordination of the curriculums and training activities in the various military schools. With the Operations Directorate of the General Staff and the branch commands, it plans the overall armed forces training program.

There is some training of politically reliable officers and enlisted men in the Soviet Union. There is cross-service training in Hungary as well—for example, naval personnel are trained in the ground forces engineering school at Szentes and in the air force officers school at Szentes and in the air force officers school at Szentes and School in September 1967 the existing specialized service schools were upgraded to 4-year institutions, equal in legal and formal status to civilian institutions of higher learning.

Both joint and combined training exercises are held. Hungarian units first took part in Warsaw Pact maneuvers in the spring of 1962; the maneu-

FIG: jac 2. Armed forces personnel strengths (S)

	GROUND FORCES	AIR FORCE	NAVAL FORCES	TOTAL	MILITARIZED SECURITY FORCES*
World War II (peak)	350,000	24,000	3,000	377,000	
1950 (July)	38,500	2,500	500	41,500	5,000
1951 (July)	100,000	3,000	800	103,800	12,500
1952 (July)	175,000	10,000	1,000	186,000	35,000
1953 (July)	175,000	10,000	1,200	186,200	37,500
1954 (July)	150,000	10,000	1,500	161,500	38,000
1955 (July)	150,000	10,000	2,000	162,000	38,000
1956 (Sep.)	150,000	13,500	2,500	166,060	38,000
(Dec.)	25,000	1,000	500	26,500	20,000
1957 (July)	50,000	5,500	500	56,000	30,000
1958 (July)	80,000	5,500	800	86,300	35,000
1959 'July)	90,000	4,000	1,000	95,000	35,000
1960 (July)	100,000	3,800	1,200	105,000	35,000
1961 (July)	100,000	3,600	1,500	105,100	35,000
1962 (July)	100,000	5,000	1,500	106,500	35,000
1963 (Jul.; )	100,000	5,000	1,500	106,500	35,000
1964 (July)	100,000	5,000	1,500	106,500	35,000
1965 (July)	100,000	5,000	1,500	106,500	35,000
1966 (Jan.)	100,000	5,000	1,500	106,500	35,000
1967 (July)	100,000	5,000	1,500	100,500	35,000
1968 (July)	90,000	6,000	1,400	37,400	35,000
1969 (Jan.)	90,000	6,000	1,400	97,400	35,000
1970 (July)	90,000	6,000	1,400	97,400	35,000
1971 (Jan.)	90,000	6,000	1,400	97,400	35,000
1972 (Jan.)	90,000	6,000	1,400	97,400	35,000

Not pertinent.

vers were held in Hungary that year. Starting in 1965 the armed forces intensified both joint and combined training; they are no longer considered deficient in the command and staff capability required for these operations. In 1965, major joint training exercises involving all line divisions and a combined exercise involving major Hungarian units and elements of the Soviet Southern Group of Forces were conducted. Again in 1966 and 1967 Hungarian forces participated in joint and combined exercises. Most notable of these was the "Vltava" exercise during September 1966, a major combined, air/ground training operation in Czechoslovakia involving Soviet, East German, Czechoslovak, and Hungarian forces. This was the first time that Hungarian forces had taken part in largescale exercises outside their national boundaries, and their inclusion in these maneuvers indicates increasing Soviet confidence in Hungarian military capabilities. In June 1968 Hungarian ground forces

participated in the "Sumava" exercise, again in Czechoslovakia, 2 months before the invasion of that 'country. In October 1970, they engaged in "Brothers-in-Arms," an exercise held in East Germany. During 1971, Hungarian ground forces participated in three major combined exercises in Hungary, one with Czechoslovak and Soviet forces and two with 'Soviet forces only.

# 6. Economic support and military budget

# a. Econo sic support

Hungary's economy is moderately well developed, but it supplies the armed forces with only a narrow range of conventional military materiel. Manufacturing is concentrated on the production of heavy industrial goods, and is greatly dependent upon imports or raw materials and some types of machinery. (C)

<sup>\*</sup>Figures from 1952 through September 1956 include 20,000 men in the Internal Security Troops (Interior Troops), the remainder being in the Frontier Guard. The reduction between September and December 1956 was the result of the revolt, and the strength of 20,000 repres. .ts an estimate of the total strength of both elements. The figures from July 1957 through January 1972 include 20,000 in the Frontier Guard, the remainder being in the Interior Troops. One hundred of the 35,000 men in the security forces are assigned to the rive; section of the Frontier Guard.

Current production of ground forces materiel includes amphibious armored reconnaissance vehicles, 57-mm antiaircraft guns, small arms (Figure 3), ammuntion, explosives, signal equipment, transport vehicles, and quartermaster equipment. Naval construction is limited to small river patrol craft. Hungary has no significant aircraft industry, and most of the country's aircraft have been purchased from the U.S.S.R. Missile systems have been supplied by the Soviet Union. Hungary is also dependent on imports-primarily from the U.S.S.R. but also from Eastern European Communist countries-for artillery, armored combat vehicles, and many of the more complex items of military equipment. During the period 1955-71 Hungry received from Communist countries military ad estimated in value at US\$650 million. The bulk of this aid came from the Soviet Union. (S)



FIGURE 3. Hungarian-manufactured version of the Soviet AKM automatic rifle equipped with a night-vision device (U/OU)

# b. Military budget (S)

The military budget is prepared annually by the Ministry of Defense in collaboration with the Ministry of Finance and the Party Central Committee. This budget is then presented to the Council of Ministers for integration into the overall national budget. After approval by the Council of Ministers, the total national budget is submitted to Parliament for formal enactment. Parliament has the constitutional authority to change all budget proposals, but in practice it functions as a rubber stamp, endorsing all proposed legislation submitted by the Council of Ministers. As is the case in other Communist countries, the announced figures do not include all expenditures for military purposes, and some military costs, particularly those for military research and development, are charged to other budget accounts. Research and development, however, are believed to account for a relatively small portion of total military expenditures in Hungary. Defense budgets for fiscal years 1967 through 1972 appear in Figure 4.

#### 7. Logistics (C)

The Rear Services Directorate (Figure 1) is responsible for the procurement, storage, and issue of common-use items (such as rations, clothing, petroleum products) for all of the armed forces. Technical services of the respective branch commands, working in coordination with the rear services system, are responsible for the procurement, storage, and issue of items peculiar to the individual branches of service.

The Rear Services Directorate and the individual branch commands maintain central and regional supply depots for the storage and distribution of their respective supplies. Most of the central depots are in or near Budapest. Regional supply depots are maintained throughout the country and are controlled by the Ministry of Defense through the Chief of the Rear Services Directorate. The line divisions and other major units, in turn, maintain

FIGURE 4. Annual military budgets (C)

	1967	1968	1969	1970	1971	1972
Ministry of Defense budget (millions of forints)	5,437	6,400	8,029	8,898	9,440	9,715
Defense as percent of total national budget	5.2	4.6	5.1	5.1	4.8	4.5
Defer se as percent of estimated GNP	2.4	3.0	3.6	3.8	4.0	4.0

NOTE -The official rate of exchange of 10.81 forints = US\$1.00 is artificial. Converting the sums to U.S. dollars on this basis would be unrealistic and deceptive.

their own depots and supply points for their subordinate units.

# B. Ground forces

The mission of the Hungarian ground forces is to defend the national territory; in wartime these forces would be employed as part of the Warsaw Pact forces, The Hungarian ground forces are small-among the smallest of those of the active Warsaw Pact scates. In 1960 the Soviets decided to allow Hungary to develop a small national field army, and in 1961 the tempo of development picked up. Over the next 2 years new types of equipment were brought into the inventory, the forces began reorganizing along Soviet lines, military spending substantially increased, and the Kadar regime launched an intensive campaign to raise the prestige of the military. Soviet control exerted through the Warsaw Pact and Soviet advisers assigned to the various directorates and commands of the Hungarian Ministry of Defense developed a ground force modeled after Soviet ground forces in organization, training, and equipment. It is estimated that today the Hungarian ground forces could make a limited military contribution to the Warsaw Pact during wartime. (C)

# 1. Organization (C)

Major units of the ground forces are controlled by the Minister of Defense through the 5th Army Headquarters, in Szekesfehervar (about 35 miles southwest of Budapest), and the unidentified corps headquarters at Cegled. During peacetime, all four operationally ready divisions (three motorized rifle and one tank) are subordinate to the 5th Army Headquarters, and the remaining two divisions (one motorized rifle and one tank), both understrength, are believed to be subordinate to the unidentified corps headquarters. Wartime subordination may differ. Unlike other Warsaw Pact countries, Hungary does not have military territorial subdivisions. Divisional and lower unit organization generally follows the Soviet pattern, though the Hungarian line divisions are smaller than those of the Soviet ground forces. Armored and motorized divisions represent recent concepts of Soviet tactical organization and are advanced well beyond those of the prerevolt period. There are still some equipment deficiencies, especially in armored personnel carriers, when measured against wartime tables of equipment. Gadually, however, the Hungarians are receiving some modern Soviet equipment. Limited quantities of SCUD tactical surface-to-surface missiles (Figure 5), necessary for a wartime field army, are on hand, and free-rocket-overground (FROG) battalions are integral to several line divisions (Figure 6) and are authorized in the wartime tables of organization and equipment of both the motorized rifle and the tank divisions.

The motorized rifle division—the basic tactical unit, with an authorized wartime strength of about 9,300 men—is designed to provide the heavy fire-power, tactical flexibility, and maneuverability needed in both modern conventional warfare and nuclear warfare. This Soviet type of streamlined combat division, smaller than the former infantry division is made up of the basic three motorized rifle regiments, one tank regiment, and eleven supporting units (communications, engineer, antiair-

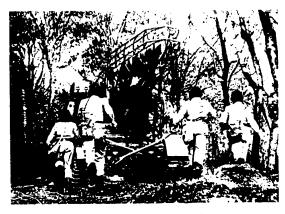


FIGURE 5. SCUD A missile and crew on maneuvers (U/OU)



FIGURE 6. FROG-5 missile system (C)

craft, FROG, maintenance, reconnaissance, rocket launcher, motor transport, and medical battalions and chemical defense and traffic control companies).

The Soviet-type tank division, with an authorized wartime strength of about 7,200, consists of three tank regiments, one motorized rifle regiment, one artillery regiment, and eleven supporting units similar to those of the motorized rifle division.

# 2. Strength, composition, and disposition <sup>2</sup> (C)

Including 4,600 ground force personnel assigned to the air defense element of the air and air defense forces, the present strength of the ground forces is estimated at 90,000 officers and enlisted men. Of these, 20,000 officers and 5,000 noncommissioned officers make up the regular cadre. The remainder are conscripts, most of whom serve on active duty for 2 years. An estimated 5,000 men of each conscript-age class are selected for an additional year of extended service; these are mostly technicians and personnel who have received technical schooling during their first 2 years of service. There are an estimated 690,000 reserves who have served on active duty with the ground forces since 1950-51, and, of these, 234,000 have completed active duty in the immediately previous 5 years.

In addition to the four motorized rifle divisions, two tank divisions, and the SCUD (SS-1) tactical missile brigade, which has an authorized wartime strength of 1,000 men, there are sufficient separate line and support units to form an operational field

<sup>2</sup> For detailed current information see Order of Battle Summary, Foreign Ground Forces and Military Intelligence Summary, both published by the Defense Intelligence Agency. army. These units include three artillery regiments of 545 men each, one antiaircraft regiment of 700 men, and an airborne battalion of 400 men. Combat units are generally disposed throughout the country, with the exception of the northwestern part, which is garrisoned primarily by troops of the Soviet Southern Group of Forces. The operationally ready Hungarian divisions are, however, located in western Hungary and oriented toward the Austria and Yugoslavia borders. Major combat vehicles and weapons of the motorized rifle and tank divisions include medium and amphibious tanks, armored reconnaissance vehicles, SNAPPER antitank missiles (Figure 7), 82- and 120-mm mortars, and 57-mm antitank and antiaircraft guns.

The Soviet ground forces in Hungary consist of approximately 35,000 ground troops organized into four line divisions (two tank and two motorized rifle) and smaller support and service elements. These forces, as well as the six Soviet air regiments in Hungary, are controlled by Soviet Headquarters, Southern Group of Forces, Budapest.

# 3. Training (S)

Individual and small-unit training is thorough and realistic, with emphasis on combat under special conditions such as at night; across water barriers; under chemical, biological, and nuclear attack; and with nuclear weapons support. Ground force training is gradually increasing in frequency and level.

The training program for 2-year conscripts consists of three 8-month training cycles. During the first cycle, the conscript receives basic advanced individual training. The second and third 8-month cycles are devoted to unit training, exercises, and maneuvers. The three 8-month cycles are employed



FIGURE 7. AT-1 SNAPPER antitank missiles ready for firing (C)

so that at any given time two-thirds of the total conscript force will have received some training.

Small-scale and unit field exercises are part of the normal training process throughout the year (Figure 8). Large-scale field maneuvers and exercises normally are held in late summer or early autumn. Each year one of the two firing battalions of the Scup brigade plus essential support elements are sent to the U.S.S.R. for training and live firing of Scup missiles.

The military school system is organized on the basis of interbranch schools in which instruction is given at all levels—enlisted specialist, noncommissioned officer, officer candidate, and command and staff. The Miklos Zrinyi Military Academy, in Budapest, trains captains and majors of the basic arms for combined-arms operations. Separate schools for the various arms and services have been established, among them an infantry school and chemical school, both at Szentendre, an armor



FIGURE 8. Communications troops in training. Ultrahigh frequency antenna is used with COIN GRASS radio relay system. (C)

school at Retsag, a signal school at Budapest, an engineer school at Szentes, and a radar school and an artillery school, both at unknown locations. Both officers and enlisted men attend. Regiments also maintain noncommissioned officer schools that train promising recruits as NCO's, technicians, and specialists. Promising field grade officers who are considered politically reliable are sent to Soviet military schools and academies.

Reservists are called to active duty periodically. Younger reservists and some specialists are called to active duty yearly, normally for periods ranging from 2 weeks to 1 month. Reservists train with units to which they would be assigned in wartime. Reserve officers and extended service NCO's may be called up for training once every 3 years for periods of 1 to 4 months. Conscripts can be called every 3 years for 1 to 3 months. From time to time largescale mobilization exercises are held. Such an exercise was neld in March 1968; in it individual reservists were put into regular ground forces units, while reserve units conducted their own training under the supervision of regular officers and NCO's. Civilian trucks were used by the reservists throughout the exercise. Assignment to units is based on individual qualifications and proficiency. Generally speaking, the reserves are sufficiently trained to be able to perform effectively in their mobilization positions.

#### 4. Logistics (C)

The procurement, storage, issue, and maintenance of supplies and equipment in common use throughout the armed forces are the responsibility of the armed forces Chief of the Rear Services Directorate and his representatives at lower command echelons down to regiments and separate units. Supply depots are maintained throughout the country to facilitate the issue of rations, fuel, clothing, medical supplies and other general issue items. Requisitions are usually initiated by the lower units and are routed through to the division, which places the requirement on the depot. Procurement, storage, and issue of specialized equipment peculiar to any one branch of service are handled by technical and supply elements within that branch, with close coordination between the branch and the rear services apparatus. Branch technical representatives are assigned at division level and the command level of separate units to assist the unit rear services officers. Branch supplies are requisitioned through separate channels, but in most cases depots for specialized branch items are located near those of the rear services for general supplies.

Peacetime maintenance is adequate, and sufficient basic weapons and equipment are available to bring the existing units up to full strength; it is estimated that the six existing divisions could be brought to full strength within 24 hours, the four ready divisions could be deployed in 1 day, the understrength tank division could be deployed in 3 to 5 days, and the understrength motorized rifle division would require a week or longer to prepare for deployment. Other than light infantry, the mobilization of additional divisions, however, would depend on Soviet ability or willingness to provide large quantities of additional equipment such as tanks, artillery, and armored personnel carriers.

# C. Naval forces

The Military River Flotilla exists primarily to support ground forces operations. Its mission is twofold-to deny use of Hungarian waterways to the enemy and to facilitate exploitation of those waterways by the Hungarian ground forces. Specific wartime functions would be to lay defensive minefields, sweep enemy mines, support rivercrossing operations, and protect the flanks of ground forces elements moving along the rivers of the country. In peacetime the force patrols the riverine borders and assists in maintaining law and order on inland waterways. A strategic requirement exists for forces to fulfill these missions on the Danube, the Tisza, and Balaton lake. Available forces, including reserve ships, are adequate to support the ground forces in river-crossing operations and to conduct harassment attacks against enemy crossings. However, the flotilla would be unable to fulfill its mission on all three waterways simultaneously. Except on the Danube, the mine laying capability is inadequate. The mine countermeasures capability is also limited; even the Danube could not be kept open if it were subject to a largescale attack with the more sophisticated mines. (S)

# 1. Organization (S)

The Commander of the Military River Flotilla is directly subordinate to the Minister of Defense. The commander exercises administrative and operational control over all naval forces in Hungary. His principal assistants at headquarters are the political officer, the chief of staff, and the technical

deputy. It is the responsibility of the political officer to assure the loyalty of all personnel to the Communist regime and to assist in morale and welfare activities. The chief of staff oversees operational planning, training, communications, and general administration at the headquarters level. Supply, equipment maintenance, and a variety of other support activities are the responsibility of the technical deputy. Each of these assistants has a number of subordinates to handle specific aspects of the staff functions.

Originally, the operational elements of the flotilla were subdivided into a number of brigades and operated on both the Danube and Tisza rivers. After the 1956 revolt, the operational elements were organized into the 44th Independent Brigade and activity was limited to the Danube; however, recently there have been indications of naval activity on the Tisza, at Szentes and Mindszent, and on Balaton lake. The Commander of the Military River Flotilla serves concurrently as Commander of the 44th Independent Brigade, both elements having headquarters at Ujpest. He also acts as Chief of the River Guard Department, a small planning staff within the Ministry of Defense which exercises overall supervision of all militarized river forces.

The 44th Independent Brigade comprises three principal elements—the Mine Planter-Sweeper Detachment, Assault Detachment, and Support Subdetachment. The Mine Planter-Sweeper Detachment has 100 frogmen (sappers) and specializes in mine clearance. The Assault Detachment, which includes 100 demolition specialists and 180 engineer ratings for bridge construction, supports the ground forces by securing their flanks during operations along the Danube, by conducting rivercrossing operations, and by providing fire support. The Support Subdetachment operates approximately one-third of the service craft of the flotilla.

A naval ship brigade, by definition, has no appreciable support facilities ashore. Hence, it must be assumed that most support functions are subordinate to the flotilla Base Battalion. The battalion would turnish logistical support ashore through the depots and undertake repair and maintenance of ships at flotilla workshops at Ujpest. It also operates half of the flotilla service craft.

The Ujpest Reserve Depot, also probably subordinate to the Base Battalion, prepares mobilization plans and maintains reserve ships. During winter months, this depot also provides maintenance for a large percentage of regular flotilla units. Another

subordinate element is the Dunafoldvar Flotilla Mine Depot, located some 50 miles south of Budapest.

The Training Battalion, also probably subordinate to the flotilla, operates combat ships not assigned to or being used by the 44th Brigade. Normal strength is 18 minesweeping boats, but this battalion may also make use of reserve ships for the training of reservists in summer months.

# 2. Strength, composition and disposition 3 (S)

Personnel strength of the Military River Flotilla is estimated at about 1,400; some 140 are officers and the balance, enlisted men. About 800 serve afloat, 400 are in staff and support capacities, and 200 are undergoing various types of training at any given time. All are stationed at Ujpest except about 100 support personnel at the Dunafoldvar Flotilla Mine Depot and 100 staff personnel at the Ministry of Defense and at various ground forces schools. During the summer a small percentage of afloat and support personnel may be found at Baja and on Balaton lake. A small personnel contingent also may be located on the Tisza and at Szentendre on the Danube. Approximately half of the trainees would be at Ujpest under the Training Battalion and the rest at ground forces schools or in training in the U.S.S.R.

Most vessels are of postwar construction, especially designed for river operations, and in generally good material condition. The inventory of operational vessels of the Military River Flotilla is as follows:

Combatants:	
River gunboats	4
River patrol boats	15
Minesweeping boats	42
Utility landing craft	2
Auxiliaries:	
Barracks ships	2
Service craft:	
Launches	43
Open barges	4
0 11.1.	1
Covered lighter	
Covered lighter	ī
Floating crane	_
Floating crane Ammunition lighters	1
Floating crane Ammunition lighters Fuel oil barges	1 3
Floating crane Ammunition lighters	1 3 2

<sup>&</sup>lt;sup>a</sup>For detailed current information see Strength and Disposition of Foreign Navies and Military Intelligence Summary, both published by the Defense Intelligence Agency.

In addition to these vessels, there are 53 in reserve—two small river monitors (BMRL), 16 river gunboats (PR), eight minesweeping boats (MSB), and 27 river patrol boats. Nine of the river gunboats, six of the minesweeping boats, and all 27 river patrol boats have been built since World War II. The condition of and maintenance procedures and schedules for these vessels are not known. All reserve vessels are probably kept at Ujpest.

Of the operational vessels, the Mine Planter-Sweeper Detachment operates 24 of the mine-sweeping boats, and the Training Battalion, the remaining 18. The Assault Detachment uses four river gunboats, 15 river patrol boats, two utility landing craft, 20 launches, three mobile bridge sections, and two small harbor tugs. The Support Subdetachment operates two fuel oil barges, 13 launches, three ammunition lighters, a floating crane, and a small harbor tug. The Base Battalion utilizes 10 launches and other auxiliary and service craft.

#### 3. Training (C)

Preinduction training is provided by the Hungarian Sport Federation in conjunction with the Communist Youth League. Conscripts enter naval service as recruits and receive basic training, including shipboard time, in the Training Battalion at Ujpest. Recruit training includes 2 months of basic instruction and 4 months of specialty training. Recruit training ends with 1 week of proficiency examinations to select outstanding personnel. Those selected are given 3 weeks of junior NCO instruction. All enlisted personnel between the ages of 17 and 23 who have completed elementary school may apply for admission to one of several NCO schools. Technical training for enlisted men is given by the naval department of the ground forces NCO engineering school at Szentes.

Professional officers are trained in ground and air forces schools. Reserve officers usually are graduates of civilian universities. Political officers presumably are trained at the Petofic Political Academy, and there is evidence that navigation officers receive instruction at the Cyorgy Kilian Air Force Officers School at Szolnok. Some flotilla officers have had advanced training in Soviet naval schools.

Training for both officer and enlisted personnel concentrates on political indoctrination. The op-

erational aspects of training emphasize river combat operations, including amphibious landings, river crossings, and bridge construction. Special attention is also given to defense against nuclear and chemical attack. Joint operational exercises are conducted with other Hungarian forces and combined exercises with other Warsaw Pact forces.

The naval reserve component numbers about 2,800. Officers are subject to recall up to age 60, enlisted men to age 50. Every 3 years reserves can be recalled for up to 90 days for training, including refresher courses in their specialties.

#### 4. Logistics (C)

Logistic support for the Military River Flotilla is coordinated at the Ministry of Defense level. Supplies and equipment are obtained from central military warehouses. Hungary has adequate facilities for the construction and repair of river craft, but much of the navigational equipment and certain engine parts, including bearings, shafts, and superchargers, are imported. Repairs are carried out mainly at the MAHART Repair Yard at Ujpest and at the Military River Flotilla Base facilities. In addition, the shipyards in Budapest, Vac, and Balatonfured are utilized on occasion for the overhaul and maintenance of naval units. The Military River Flotilla maintains a few support facilities of its own, including workshops and a supply depot at Ujpest and the Flotilla Mine Depot at Dunafoldvar. Protracted defensive or offensive operations undertaken by the flotilla would require large-scale support from the U.S.S.R.

# D. Air and air defense forces (S)

The Hungarian air and air defense forces under the National Air Defense Command (OLP) are a composite, integrated force of air, antiaircraft artillery, surface-to-air missile, and radar units. They are charged with the missions of destroying, nullifying, or reducing the effectiveness of attack by aircraft or cruise missiles after they become airborne and of providing close air support to the Hungarian ground forces.

The Hungarian National Air Force is considerably smaller than those elements of the Soviet Air Forces stationed in Hungary. It is essentially an air defense force, though there is limited training in ground support. It is equipped primarily with fighter/interceptor jet aircraft, all Soviet built.

#### 1. Organization

For air defense Hungary is a single, centrally controlled district within the overall Warsaw Pact system that is coordinated by the Moscow head-quarters of the Soviet PVO Strany (Air Defense of the Country), the operational command that coordinates Soviet air defense. Air situation reports are exchanged between the OLP, the Soviet Air Forces, Hungary, of the Soviet Southern Group of Forces, Budapest, and the other Eastern European Communist air and air defense commands. All of these are in direct communication with the Soviet PVO Strany and the Warsaw Pact Headquarters.

The Hungarian air defense district is divided into two air defense zones, Eastern and Western, with headquarters at Miskolc and Veszprem, respectively. These headquarters control all air defense elements within their respective zones. The two zones are each further subdivided in two air defense sectors organized for air surveillance. The radar defenses include two relatively independent systems—the Hungarian National Air Defense System and the Soviet system that supports the Soviet Southern Group of Forces. Both have independent headquarters in Budapest.

The commander of OLP exercises administrative and operational control over fighter aviation units of air defense. A Soviet military mission is also attached to the OLP command; it probably includes political representatives. Directly subordinate to the OLP commander are the following sections: air traffic, estimates, liaison, logistical services, officer personnel, operations, technical aviation, and technical information. Soviet advisers are believed to be primarily concerned with logistics, operations, and training.

#### 2. Strength, composition, and disposition 4

The air force portion of the air and air defense force has a personnel strength of about 6,000, including about 250 pilots, and consists of three fighter regiments, a transport squadron, and a helicopter squadron. The regiments are based at

<sup>&</sup>lt;sup>4</sup>For detailed current information see European Communist Aircraft Order of Battle and Military Intelligence Summary, both published by the Defense Intelligence Agency. For additional information on airfields see the Transportation and Telecommunications chapter of this General Survey.

Keeskemet, Papa, and Taszar, and both squadrons are based at Veszprem.

Although equipped by the Soviet Union largely with supersonic fighters, the Hungarian air force component would contribute little to the Warsaw Pact air and air defense efforts. As indicated below, the total inventory of fighter aircraft is only 137, about one-fourth of the fighters are older versions (FARMER and FLESCO), and, of the newer high-performance aircraft (FISHBED), less than one-half are all-weather versions (FISHBED D, F).

<b>Г</b> юнтек түре	Numbi			
FARMER B, E (MiG-19)		10		
FISHBED C, E (MiG-21)		57		
FISHBED D, F (MiG-21)				
Fresco A, B, C (MiG-17)				
Fresco D (MiG-17)		12		
Total		137		

The remaining aircraft consist of two turboprop (Coke) and seven piston-type (Cab and Crate) transports and 17 medium helicopters (Hound and Hip).

Pilot reserves are estimated to number only about 40. There are some 60 to 70 transport pilots and 110 other crewmen employed by MALEV (Magyar Legikozlekedesi Vallalat), the national airline, which serves as an air force reserve pool and would provide personnel if required.

The Soviet Air Forces, Hungary (SAFH), an element of Soviet Tactical Aviation corresponding to a tactical air army, consist of six regiments with a total personnel strength of about 12,000. The regiments have a total of 228 combat aircraft—148 fighters, 64 light bombers, and 16 reconnaissance aircraft—and are based at Budapest/Tokol, Debrecen, Kiskurlachaza, Kunmadaras, and Sarmellek airfields.

The Hungarian air defense surface-to-air missile (SAM) forces are an integral part of the unified Warsaw Pact defense force and, although their primary mission is to defend national territory, they serve as well to defend the pact area against air attack from the west and south. As of 1 January 1972, the Hungarian SAM forces were organized into three SAM regiments, consisting of 13 SA-2 battalions in all. Nine battalions are deployed as a "vital area defense" of Budapest, the remaining four provide air defense for Miskolc. The Hungarians also maintain one SAM training site. Two Soviet SA-2 battalions and six Soviet SA-4 battalions, all probably subordinate to the

Soviet Southern Group of Forces, are deployed as a westward extension of the Budapest defense. Figure 9 shows a typical SA-2 site layout.

Antiaircraft artillery units provide for the air defense of the ground forces troops and installations. Soviet SA-3 SAM battalions were introduced into Hungary, possibly in 1967, and are currently deployed at six sites, each of which provides for low-altitude defense of a Soviet airfield. Figure 10 shows a typical layout of an SA-3 site.

There are about 40 aircraft control and warning (ACW) radar sites scattered throughout the country but primarily in the west, the direction from which attack is considered most likely. These include both early warning (EW) and ground control interception (GCI) sites. About half of these installations are manned by the Soviets and support the Soviet ACW network in Hungary. All ACW sites are equipped with the better Soviet radar equipment, including Tall King (long-range early warning) which is deployed along the west and southern borders as a screen against



FIGURE 9. Typical SA-2 surface-to-air missile site. Upper right inset: SA-2 missile on a transporter. Lower lett inset: FAN SONG, a tracking and guidance radar. (S)

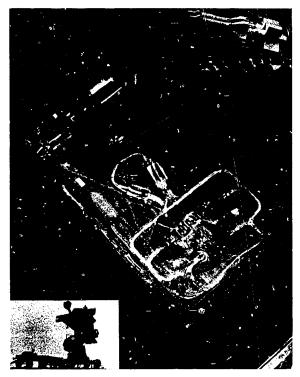


FIGURE 10. Typical SA-3 surface-to-air missile site. Upper right inset: two SA-3 missiles on transporter. Lower left inset: LOW BLOW radar, associated with the SA-3. (S)

approaches from Austria and Yugoslavia. Side Net, the best Soviet heightfinder radar, is deployed at most GCI sites.

# 3. Training

# a. Air force

Pilots for the Hungarian Air Force are recruited mainly from the paramilitary organization Hungarian National Defense Federation (MHSz). Although this organization is voluntary and parttime, its contribution to the military is substantial. In addition to the premilitary training given the Hungarian youth, the MHSz also holds refresher courses for reserve officers.

Suitable students are selected for military training at 17 and begin with a 6-week preparatory flying course at Bekescsaba airfield in the southeast. Only about 30 out of every 1,000 students are scleeted for this course. After the preparatory flying course, the air force candidates spend another year in the MHSz while completing school. They

are then given an air force examination to determine if they are mature enough to handle jet aircraft.

The first year of flight training takes place at Szolnok in the Czechoslovak-built Maya (L-29) and possibly the Soviet-built MIDGET (U-MiG-15). The next 3 years are spent at the Krasnodar Flight School Center in the U.S.S.R., where training continues in the U-MiG-15, L-29, and Fresco (MiG-17). Upon completion of the training in the U.S.S.R., the student returns to Szolnok for 2 years of training in the FACOT (MiG-15), MONGOL (U-MiG-21), and FISHBED (MiG-21). At the end of the 6-year flight training period, which includes studies in politics, the Russian language, and a number of technical subjects, the graduate is assigned to an operational unit. Pilot flight time is low by U.S. standards. Operational training exercises are held throughout the year, sometimes involving Soviet and other Warsaw Pact forces.

# b. Surface-to-air missile forces

Surface-to-air missile training is based on Soviet doctrine and training methods. There is a SAM training school located near Budapest. Selected graduates attend Soviet technical schools for advanced training, and SAM units travel to the U.S.S.R. on a scheduled basis for live-firing exercises. SAM units maintain proficiency through onsite training in Hungary and participation in joint air defense exercises.

# 4. Logistics

# a. Air force

The Hungarian Air Force logistics system is patterned after that used by the Soviet Air Force. The Chief of Rear Services is responsible for air base support services and the procurement and issue of aviation technical supplies. Through the deputy commanders for rear services of the air regiments, he supervises the housekeeping and supply tasks necessary to support sustained flight operations. Hungary has a well developed industrial base and produces most of the common-use items required by the air force, but it is dependent on the Soviet Union for aircraft, engines, spare parts, and other aviation technical supplies.

Flight line maintenance, periodic inspections, and all but major repairs of combat aircraft are accomplished at airfields by the regimental maintenance organizations. Major repair work and overhauls of aircraft are performed at the Budapest/Tokol

Aircraft Repair Base. Aircraft engines have reportedly been sent to the aircraft engine repair plant in Plovdiv, Bulgaria, for overhaul.

The Hungarian Air Force logistics system adequately supports the flight-combat training programs and other scheduled flying operations in peacetime. The quantities of aviation technical supplies held in Hungarian air depots are probably only adequate to support wartime combat operations for a short period of time. The Hungarian Air Force would consequently be incapable of supporting sustained combat flying operations without Soviet assistance.

# b. Surface-to-air missile forces

SAM missiles, equipment, and special parts are imported from the Soviet Union. General-purpose equipment is probably manufactured domestically. There are five Hungarian SAM support facilities (two at Budapest and one each at Dunafoldvar, Miskolc, and Nyiregyhaza) and five Soviet SAM support facilites (at Debrecen, Mor, Papa, Szekesfehervar, and Veszprem).

# E. Militarized security forces

Paramilitary forces consist of the Frontier Guard (HO) and the Internal Security Troops (BKH) also known as the Interior Troops-both of which are normally under some form of joint subordination to the Ministries of Interior and Defense. These forces are organized into military-type formations and are equipped primarily with light infantry weapons. Training consists mainly of basic infantry fundamentals plus instruction in the particular security functions of the respective force. In the assigning of personnel to the security forces, political reliability figures strongly. Political indoctrination is given special and continual emphasis. In wartime, units of the Frontier Guard and the Interior Troops could be assigned to ground field commands. (C)

#### 1. Frontier Guard (C)

The Frontier Guard has an estimated strength of 20,000 men. Officer personnel are provided by the Ministry of Interior and all are staff officers of the III Main Group Directorate (AVH), the secret or political police. Recruits are obtained from the annual military draft for tours of duty of 24 months. Rank designations and uniforms are identical with those of the ground and naval forces

except for a distinctive green Frontier Guard insignia.

The Frontier Guard is responsible for guarding the country's borders. To prevent illegal border crossings and insure the security of lines of communication in the border zone, about 19 battalions are deployed in 11 district commands along the frontiers, with the stronger units along the Austria and Yugoslavia borders. A river section comprised of about 100 men and 25 ports security boats operates principally along the 85-mile section of the Danube bordering Czechoslovakia. Additional units consist of an independent battalion at Gyor and several independent engineering battalions in the interior. All are subordinate to the guard head-quarters in Budapest.

Recruits receive approximately 3 months of basic training in infantry and frontier security. Mortar training is given to a few men—only the district reserve forces have mortars. District commands have their own noncommissioned officer training school, and most do their own recruit training. Permanent training establishments include the Frontier Guard Signal School, Adyliget; the Equestrian School, Kiskunhalas; and the Dog-handlers Training School, Dunakeszi.

The guard is equipped with rifles, submachineguns, light and heavy machineguns, handgrenades, mortars, and antitank weapons. Transportation consists of patrol boats, helicopters, trucks, staff cars, buses, motorcycles with sidecars, and horses. Frontier Guard engineer units are equipped to remove and plant mines and to maintain border obstacles.

# 2. Internal Security Troops (S)

The Hungarian Internal Security Troops (BKH), commonly called the Interior Troops, constitute the regime's most loyal and reliable troop force. The force was established by the Communists soon after they first took power in Hungary. Personnel strength is about 15,000, including both career and conscript personnel. The conscripts serve 24-month tours of active service. Commissioned officers are provided from the secret police (AVH). Rank designations and uniforms are identical to those of the ground forces.

The primary mission of the Interior Troops is to guard the regime. They are responsible for the protection of the economic, political, and social order of the state. Specific duties include guarding sensitive installations and lines of communication, traffic control, detection and apprehension of foreign agents and dissident citizens, riot control, and supporting other military and civil police and the AVH.

The Interior Troops are organized into districttype commands with units of company to regimental size stationed at strategic locations within the districts. Two regiments comprised of from 1,000 to 1,500 men each, 13 battalions of 900 men each, and a 500-man headquarters unit have been identified to date. Recruits receive 2 months of basic training in weapons, small unit tactics, and special security procedures. Political indoctrination and training are given special emphasis. Field training of troops has been noted in the past in conjunction with ground forces exercises.

The troops are armed primarily with light infantry weapons. Regimental weapons companies have antitank guns, heavy machineguns, and mortars. One of the regiments is reportedly equipped with water cannon similar to those used in East Berlin.

# GLOSSARY (U/OU)

ABBREVIATION	Foreign	English
AVH	Allamvedelmi Hatosag	State Security Authority
ВКН	Belso Karhatalom	Internal Security Troops (Interior Troops)
но	Hatarorseg	Frontier Guard
HSWP	Magyar Szocialista Munkaspart	Hungarian Socialist Workers Party
KISz	Kommunista Ifjusagi Szovetseg	Communist Youth League
MAHART	Magyar Hajozasi Reszvenytarsasag	Hungarian Shipping Joint Stock Company
MALEV	Magyar Legikozlekedesi Vallalat	Hungarian Airlines
MHSz	Magyar Honvedelmi Szovetseg	Hungarian National Defense Federation
MN	Magyar Nephadsereg	Hungarian People's Army
OLP	Orszagos Legvedelmi Parancsnoksag	National Air Defense Command
PVOP	Polgari Vedelem Orszagos Parancsnok- saga	National Headquarters for Civil Defense
PVO Strany	Protivo Vozdushnaya Oborona Strany (Russian)	Air Defense of the Country
SAFH		Soviet Air Forces, Hungary

# Places and Features Referred to in this Chapter (U/OU)

	COORDINATES			
	•	'N.	0	'E.
Adyliget (sec of Budapest)	47	33	18	56
Baja	46	11	18	58
Balaton (lake)	46	50	17	45
Balatonfüred	46	57	17	53
Budapest	47	30	19	05
Cegléd	47	10	19	48
Danube (stream)	45	20	29	40
Debrecen	47	32	21	38
Dunaföldvár	46	48	18	56
Dunakeszi	47	38	19	08
Esztergom	47	48	18	45
Győr	47	41	17	38
Kecskemét	46	54	19	42
Kiskunhalas	46	26	19	30
Mindszent	46	32	20	12
Miskole	48	06	20	47
Mór	47	23	18	12
Nyíregyháza	47	57	21	43
Pápa	47	20	17	28
Plovdiv, Bulgaria	42	09	24	45
Rétság	47	56	19	08
Székesfehérvár	47	12	18	25
Szentendre	47	40	19	05
Szentes	46	39	20	16
Szolnok	47	11	20	12
Taszár	46	22	17	55
Tisza (stream)	47	30	20	40
Ujpest	47	34	19	05
Vác	47	47	19	08
Veszprém	47	06	17	55
Voronezh, U.S.S.R	51	38	39	12
SELECTED MILITARY AIRF	IEI.	DS		
Budapest/Tokol	47	21	18	59
Debrecen	47	29	21	37
Kiskunlachaza	47	11	19	05
Kunmadaras	47	23	20	47
Papa	47	22	17	30
Sarmellek	46	41	17	10

Secret